

ABSTRACT

Provided are a method for preparing an array for authenticating biological samples and a method for authenticating the biological samples based on analysis of variable sequences of ribosomal RNA genes as well as a kit for authentication of the biological samples. The hybridization of probes of the samples to the array of overlapping fragments of authentic variable ribosomal RNA gene regions is quantified. The test enables distinction of species or prokaryotic strains and is unaffected by intra-species or strain polymorphism. The method disclosed is illustrated by authentication of traditional Chinese medicinal materials.